YORK UNIVERSITY

FACULTY OF HEALTH

SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE

HH KINE 2049 3.0

RESEARCH METHODS IN KINESIOLOGY

Fall 2018

This course is an introduction to the procedures utilized to design and conduct research in the discipline of Kinesiology. Topics covered include research design, ethics in research, information retrieval, data collection methods, subject selection, sources of error, types of research, and presenting results. In addition, students will gain "hands-on" experience using computers as a tool to assist in research.

Prerequisites: N/A

Course Credit Exclusions: PSYC 2030 3.0

Course Director: Merv Mosher
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Office Hours:
Drop-In [or]
By appointment

Laboratory Instructors: (to be announced)

Lectures: Section A - M,W, 10:30, Location: ACW 109
Section B - M,W, 11:30, Location: ACW 109

Laboratories: CB 125A [Section A] or CB 162 [Section B].

See the York University Lecture Schedule for a listing of lab times.

Students with access to a computer with a Web Browser, will be able to complete the lab assignments at home prior to attending the weekly lab.

*Labs commence the week of September 17, 2018.

Computer Accounts: All students require a **Moodle** account and a **"FAS – File Access Service"** account. It is expected that students will check their Moodle accounts daily. http://moodle.yorku.ca

Course texts:

Lecture Notes, Laboratory Manual & Readings Course Kit: Research Methods in Kinesiology, York University, 2018.

Course Evaluation:

Lab Assignments (Optional)	10%	Weekly assignments based on labs.
Mid-term exam 1 (Optional)	20%	Scheduled ***Oct. 24***, during lecture time.
Mid-term exam 2 (Optional)	20%	Scheduled ***Nov. 28***, during lecture time.
Final exam (**Required**)	50%-100%	During December exam period.

Students who do not write Mid-term 1 waive the right to receive "a specific percentage of graded feedback" prior to the drop date for the Fall term.

Students must complete all of the lab assignments to be eligible for end of term grade adjustments

N.B. An appeal against a grade assigned to an item of course work must be made in writing to the course director within 7 days of the graded work being made available to the class. The result of an appeal may cause the grade to increase, decrease or remain the same.

Although numerical marks are assigned to each piece of work in this course there should be no assumption that a total number of marks translates directly to a letter grade. Letter grades will be determined by the descriptions in the York University Undergraduate Calendar.

The percentage allocated for any course work not attempted/completed will be added to the final exam.

* All exams cover material from the lectures, readings and labs. *

In the event a mid-term exam is missed the percentage allocated to the exam will be added to the final. There are no make-up exams in the course.

Students who miss the final exam will only be allowed to write a deferred final exam if the student provides a completed Registrar's Office Attending Physician's Statement showing a physical incapability of writing the final exam, **dated the day of the final exam**.

Drop Dates:

The last day to drop a Fall term course without receiving a grade is: **Nov. 9, 2018**.

The Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript), is **Nov. 10 - Dec. 4, 2018.**

Lecture Topics:

Introduction to Research
The Scientific Process
Sampling and Measurement
Research: Questions and Types
Literature Review
Ethics: Principles and Practice
Experimental Research
Experimental Designs
Complex Experimental Designs
Qualitative Research
Survey Research
Other Types of Research
Disseminating Knowledge

Lecture Capture:
Lectures will be digitally recorded and posted online. Please note the York University policy regarding this technology.

The York University Student Code of Conduct specifically prohibits theft of intellectual property, which includes recording a course director's lecture without his/her permission or taking lecture material provided on line, modifying it, and/or using it for your own personal use or gain. The material provided is only to be used for your personal study when you take the course for which it was created. Use in any other way will result, at the minimum, in sanctions in accordance with the York Code and, at the maximum, will be breaking federal, provincial or municipal laws and will be acted on accordingly.

IMPORTANT COURSE INFORMATION FOR STUDENTS

- All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents)
- York's Academic Honesty Policy and Procedures/Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

Learning Expectations:

After completion of KINE 2049 3.0 [Research Methods in Kinesiology] students will be able to:

a) describe the "scientific method/process".
b) compare and contrast a variety of research designs appropriate for the field of Kinesiology and Health Science.
c) evaluate a research study conducted in the area of Kinesiology and Health Science.
d) analyse a research article in an academic journal.
e) apply Excel formulas and functions to solve research questions.
f) critically reflect upon health science literature in popular media.
g) define terminology commonly utilized in research.
h) plan and implement effective Internet search strategies.
i) design and create a poster presentation on an academic topic related to Kinesiology and Health Science.

KINE 2049 3.0 Research Methods in Kinesiology - Fall 2018
(Lecture Dates/Topics are Approximate)

Week Beginning:	**Monday**	**Wednesday**	**Laboratory**	**Readings**
September 3	No lecture	Introductory Class – Admin. Details	No labs this week	Chapter 1& 2
September 10	How To Add 10 Years To Your Life	"How do we know what we know?"	No labs this week	- Chapter 3 & 4 - Intro' to Excel video
September 17	Heroes & Villains in the Scientific Process	Spin Doctors & the Scientific Process	Lab 1	- Chapter 5 & 6 - Video: Creating Excel charts
September 24	"Facts" and other Terms in Research	Nature and Purpose of Research	Lab 2	- Chapter 7 - Video: Multiple worksheets
October 1	Types of Research	Getting started: Sampling Procedures; Literature Review	Lab 3	- Chapter 8 - Videos: Excel Functions 1
October 8	**[Fall Reading Week]**	**[Fall Reading Week]**	No labs this week	Review previous chapters
October 15	What could possibly go wrong? Ethics in Research	"Big Bang" - Theories and other terms	Lab 4	- Chapter 9 - Videos: Excel Functions 2
October 22	Is It Real? Measurement in Research - Validity & Reliability	**Quiz 1**	Lab 5	- Chapter 10 - Videos: Excel Functions 3
October 29	Experimental Research – Design	Experimental Research	Lab 6	- Chapter 11 - Video: Excel Database
November 5	Experimental Research	Complex experiments	Lab 7	- Chapter 12
November 12	Complex experiments	How can we study that? Other types of research	Lab 8	- Chapter 13
November 19	How can we study that? Other types of research	How can we study that? Other types of research	Lab 9	- Chapter 14
November 26	Presenting Your Research	**Quiz 2**	Lab 10	- Chapter 15
December 3	Presenting Your Research [Last lecture]	Final Exam period begins	No Labs	Review all chapters
December	**Exam period** - Dec. 6 – Dec. 21	**Exam period** - Dec. 6 – Dec. 21	Exam period	**Exam period** - Dec.6 – Dec. 21